

ACC NR: AP6029897

a glass tube (see Fig. 1). To reduce both the weight and size of the relay, the device has a rotary armature, positioned parallel to the coil axis, and a return spring, placed together with contact springs on a plate perpendicular to the armature. Orig. art. has: 1 figure. [JR]

SUB CODE: 09/ SUBM DATE: 06Feb64/ ATD PRESS: 5069

Card 2/2

MAMONTOVA, L.V.

Case of tuberculosis of the liver. Kaz.med. zhur. no.2:75-77
Mr-Ap'63 (MIRA 16:11)

1. Kafedra propedevtiki vnutrennikh bolezney (zav.- dotsent
A.Ye. Gel'fman) Novosibirskogo meditsinskogo instituta.

*

MAMONTOVA, M.

"Excursion in the land of radioactive isotopes" by D. Trifonov.
Reviewed by M. Mamontova. IUn.tekh. 5 no.3:60-62 Mr '61. (MIRA 14:6)
(Radiosiotopes)
(Trifonov, D.)

MAMONTOVA, M. S.

Mamontova, I. A.

"An attempt to study certain physiological indexes among workers in the factory imeni Balashov in the city of Ivanovo." Min. Health USSR. Ivanovo State Med. Inst. Ivanovo, 1959. (Dissertation for the Degree of Candidate in Medical Science)

So: Knizhnaya letopis', No. 2, 1956

CDINTSOV, Andrey Ivanovich; SHE LAPUTIN, Viktor Ivanovich; TSIPERSON,
A.L., red.; MAMONTOVA, N.N., tekhn. red.

[Frozen prepared foods] Zamorozhennye kulinarne izdelia. Mo-
skva, Gostorgizdat, 1961. 38 p. (MIRA 15:12)
(Food, Frozen)

I 308-1-44 RTI(1)/-TR(m) IUP(c) RTI/IAJ/30/GE
ACC NR: AT6021839 (A) SOURCE CODE: UR/0000/65/000/000/0118/0124
AUTHOR: Kutaleladze, S. S.; Leont'yev, A. I.; Mamontova, N. N.;
Moskvicheva, V. N.; Shtokolov, L. S. 50
BT/1
ORG: Institute of Thermophysics, Siberian Branch AN SSSR (Institut
teplofiziki SO AN SSSR)
TITLE: Hydrodynamic theory of the heat transfer crisis in forced flow
of a boiling liquid. The crisis at high flow rates and a zero vapor
content in the flow
SOURCE: Teplo- i massoperenos. t. III: Teplo- i massoperenos pri
fazovykh prevrashcheniyakh (Heat and mass transfer, v. 3: Heat and mass
transfer in phase transformations). Minsk, Nauka i tekhnika, 1965,
118-124
TOPIC TAGS: boiling, heat transfer, hydrodynamic theory
ABSTRACT: From the theory of the limiting friction laws in the
turbulent boundary layer it follows that when the Reynolds number
approaches infinity, the critical injection in a homogeneous flow is
equal to
$$j_{kp} = 2c_{j0} \gamma W_0. \quad (1)$$

Card 1/2

L 40881-66

ACC NR: AT6021839

We assume that the amount of liquid ejected from the boundary layer region in the moment of crisis is

$$j_* = 2c_{j0} \gamma' W_0 (1 - \varphi_*), \quad (2)$$

where φ_* is the volumetric vapor content of the boundary layer region, and the energy required for this ejection comes from the loss of kinetic energy from the vapor stream, that is

$$\frac{j_*^2}{\gamma'} = \left(\frac{q_{*cp}}{\varphi_* r \gamma''} \right)^2 \gamma''. \quad (3)$$

Then

$$q_{*cp} = 2c_{j0} \varphi_* (1 - \varphi_*) r \sqrt{\gamma' \gamma''} W_0. \quad (4)$$

On the above basis, the article considers mathematically the effect of underheating of the core of the flow up to the saturation temperature, and the effect of the vapor content of the flow. Orig. art. has: 19 formulas and 3 figures.

SUB CODE: 20/ SUBM DATE: 09Dec65/ ORIG REF: 016/ OTH REF: 009

Card 2/2/MLP

YUZ'KO, S., kand. tekhn. nauk; ROZENKRANTS, I., kand. tekhn. nauk;
MAMONTOVA, O., kand. khim. nauk; PATLYAKEVICH, D., inzh.;
KISLITSIN, S.; KISLITSIN, Ye.; BUKHARSKIY, G.; RYZHKOV, P.,
izobretatel'; SOLOVSKIY, B., inzh.-mekhanik

Helping crops. NTO 6 no.6:9-12 Je '64. (MIRA 17:8)

1. Uchenyy sekretar' soveta Nauchno-tekhnicheskikh obshchestv
Ul'yanovskogo oblastnogo ob'yedineniya "Sel'khoz tekhnika"
(for Bukharskiy).

KONOPLEV, Ivan Ivanovich; MAMONTOVA, O.K., red.

[The developing industry of Amur Province] Promyshlennost'
Amurskoi oblasti v razvitii. Blagoveshchensk, Amurskoe
knizhnoe izd-vo, 1963. 125 p. (MIRA 17:4)

~~MAMONTOVA, O. M.~~

Bitumens obtained in the tetralin extraction E. V. Rakovskii and O. M. Mamontova, *Khim. Tverdogo Topliva* 5, 230-4 (1934).—Ground Matagan sapropelite (500 g.) was placed in a rotating one-l. autoclave together with 500 cc. tetralin, b. 204-208°, and the mix. heated for 6-7 hrs. at 240-250°, and 25-35 atm. This was extd. 8 times, a fresh portion (500 cc.) of tetralin being used each

1 time. The amt. of ext. constituted 18.3% of the wt. of the coal. The latter, after washing with C_6H_6 and drying, had a black color and still contained 54.35% volatiles and more than 11.85% ash. The tetralin ext. contained about 66.5% of resins. The wax-like part contained acids of the low-mol. type such as acetic, oleic and valeric acids, as well as high-mol. acids, one of which constituted probably 32 atoms of C in the mol. A. A. Boethling

A. A. Boehling

ASB.SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 10TH GROUPS										2ND AND 11TH GROUPS									
PROCESSES AND PROPERTIES INDEX																			
<i>Kinetics of the polymerization of 1,3-butadiene in the presence of phenylisopropylpotassium. O. Mamontova, A. Abkin and S. Medvedev. <i>Acta Physicochem. U.S.S.R.</i> S. 12, 269-62 (1960) (in English).—In ether soln. the sol. pressure curve of 1,3-butadiene is linear with a slight neg. deviation from Raoult's law. On addn. of butadiene to ethereal phenylisopropylpotassium (I) the cherry-red color disappears; at the end of the polymerization the red color reappears. A study of the kinetics of polymerization shows that the initial active centers form on the walls by interaction of butadiene and I mole. and that chain growth then takes place in the vol. of the soln. Chain rupture occurs either unimolecularly in the soln. or on reaction with butadiene on the surface; the I is regenerated. The kinetics obeys the equation $w = k_1 C_1 / (1 + k_2 C_1 + k_3 C_1^2)$, where C_1 = concn. of butadiene, k_1 and k_2 are rate consts. for formation and rupture and change with temp., resp., as follows: 5°, 40, 60; 15°, 20, 10; 25°, 20, 2. The apparent energy of activation of the whole process is 7.5 kg.-cal. Comparison of kinetic and chem. data shows that the polymerization is a chain-catalytic reaction.</i> F. H. Rathmann																			
ASO-SLA METALLURGICAL LITERATURE CLASSIFICATION																			
1ST AND 10TH GROUPS																			
2ND AND 11TH GROUPS																			

MAMONTOVA, O.: ABKIN, A., MEDVEDEV, S.

Polymerization Processes Laboratory, Moscow Physico-Chemical Institute im. L. Ya. Karpov,
(-1939-)

"The Kinetics of Polymerization of Butadiene - 1.3 in the Presence of
Potassium Phenylisopropyl (Fenilizopro ilkaliya)."

Zhur. Fiz. Khim., Vol. 14, No 1, 1940

MAMONTOVA, D. M.

U S S R .

10130* Kinetics of Ion-Exchange Sorption. O kinetike ionoobmennoi sorbtsii. (Russian.) O. M. Mamontova. Zhurnal Fizicheskoi Khimii, v. 29, no. 3, Mar. 1955, p. 476-479. Description method of measuring diffusion coefficients. Table, photograph, diagram. 6 ref.

Phys. Chem. Inst. in. Tsvetov, Moscow

SHARONOVA, N.F.; VERIGO, S.I.; MAMONTOVA, O.V.

Afterpurification of fuel oil water by aeration in the presence of
pyrolusite. Trud. TTTT no.10:211-216 '61. (MIRA 15:3)
(Petroleum as fuel)(Sewage--Purification)

VERIGO, S.I.; MAMONTOVA, O.V.

Determining the Petrov contact in waste waters using
the photocolorimetric method. Trudy VNIIT no.12:213-217
'63. (MIRA 18:11)

KUCHUMOVA, N.A.; VERIGO, S.I.; MAMONTOVA, O.V.

Polarographic method for determining small concentrations
of aldehydes in waste waters. Trudy VNIIT no.12:237-245 '63.
(MIRA 18:11)

VERIGO, S.I.; MAMONTOVA, O.V.

Finding butyric acid by potentiometric titration in waste waters
in the presence of sodium chloride and hydrochloric acid Trudy
VNIIT no.13:196-199 '64. (MIRA 18:2)

MAMONTOVA, T.N.

Great jubilee. Med. sestra no.8:28-29 Ag '54.

(MLBA 7:8)

1. Glavnyy vrach Kineshenskoy gorodskoy bol'nitsy No.1.
(VOZNESENSKAIA, ALEXANDRA IVANOVNA, 1881-)

MAMONTOVA, T. N.

Work of the volunteer public health group. Zdrav. Ros. Feder. 3 no.7:
25-28 J1 '59. (MIRA 13:1)

1. Glavnyy vrach Shuyskoy gorodskoy bol'nitsy Ivanovskoy oblasti.
(SHUYA (IVANOVO PROVINCE)--PUBLIC HEALTH)

24 (4)
AUTHORS:

Kolomiets, E. T.; Mamontova, T. N.

SOV/20-125-1-16/67

TITLE:

Internal Photoeffect in Molten Chalcogenide Glass
(Vnutrennyy fotoeffekt v rasplavlennom khalkogenidnom stekle)

PERIODICAL:

Doklady Akademii nauk SSSR. 1969. Vol 125. Nr 1. pp 13-14 (USSR)

ABSTRACT:

The authors were interested not only in the existence of the internal photoelectric effects in the molten phase but also in the possibility of bringing evidence of the conservation of the structure of the short-range order in the transition of the vitreous semiconductors under investigation from the solid into the liquid phase by melting. The invariability of the spectral distribution on the transition into the liquid phase may indeed be indicative of the conservation of the short-range order, and also measurements of the temperature dependence of conductivity (Ref 4) point to it. A vitreous semiconductor of the composition $4 \text{As}_2\text{Se}_3 \cdot \text{As}_2\text{Te}_3$ was chosen for the experiment. The measurements were made in a container provided with platinum electrodes. The internal photoeffect in the substance investigated remains conserved on the transition through the softening temperature, and the absolute value of

Card 1/3

Internal Photoeffect in Molten Chalcogenide Glass

SOV/20-125-1-18/67

photoconductivity remains practically unchanged in the whole temperature range investigated (i.e. from 26 to 184°). A diagram shows the final results obtained from the experiments. With a temperature exceeding the softening temperature by 28 to 30° photoconductivity does not change considerably. At 184° the material investigated behaved as a typical liquid. A further increase in temperature intensified the "noise", which rendered measurements more difficult. The experimental result obtained from the investigation under review proves the existence of an internal photoeffect in molten substances, which points to the conservation of the usual properties of matter in the liquid state, as long as the character of the interaction between the elements being present in the substance investigated is not changed considerably. The absence of variations in the spectral distribution is indicative of the conservation of the short-range order in the temperature range investigated. The observed shift of characteristics may be caused by the temperature dependence of optical absorption. There are 1 figures and 5 references, 3 of which are Soviet.

Card 2/3

Internal Photoeffect in Molten Chalcogenide Glass

ASSOCIATION: Fiziko-tekhnicheskii institut Akademii nauk SSSR
(Physico-technical Institute of the Academy of Sciences, USSR)

PRESENTED: November 19, 1958, by A. F. Ioffe, Academician

SUBMITTED: November 17, 1958

Card 3/3

30619

3/058/61/000/008/026/044
AC58/A101

15.2640

AUTHORS: Kolomiyets, B. T., Marontova, G. A., Kazanova, T. F.

TITLE: Electric properties of chalcogenide glasses

PERIODICAL: Referativnyy zhurnal, Fizika, no. 8, 1961, 199, abstract 8D76 (V sb. "Stekloobrazn. sostoyaniya". M.-L., AS SSSR, 1960, 465-470, disc. 478-479)

TEXT: Data on the electric conductivity, activation energy and intrinsic photoeffect of various chalcogenide glasses (I) are given. All the investigated glasses have p-type conductivity that is preserved in the solid and molten states and are typical semiconductors. The character of the variation with composition of the electric properties and of a number of physicochemical properties is the same as in systems of solid substitution solution of crystalline substances. Incident to crystallization of (I) the conductivity increases very sharply. Incident to crystallization of a number of these glasses the close order remains constant. It was established that impurities that are electrically active in the crystal are inactive in a glass produced from a melt of this crystal.

[Abstracter's note: Complete translation]

D. Mazurin

Card 1/1

9/07/60/000/03/021/023
0003/1000

Pyritskaya, I. M.

2nd All-Union Conference on the Vitreous State

Stable i kuranika, 1960, Nr 3, pp 43-46 (USSR)

PERIODICAL:

ABSTRACT:

The 3rd All-Union Conference on the Vitreous State was held in Leningrad at the end of 1959. It was organized by the Institut Khimicheskoy Fiziki (Institute of the Chemistry of Silicates) and the Institute of Chemistry of the Academy of Sciences of the USSR. The conference was attended by scientists from various countries, including the USSR, Poland, Czechoslovakia, and the German Democratic Republic. The main topics discussed were the structure and properties of glasses, the mechanism of vitrification, and the physical and chemical properties of glasses. The conference was held in the city of Leningrad, which was then the capital of the USSR.

At the 5th meeting, 3 reports dealt with the investigation results of sodium-boron-silicate glasses. The first report was by V. I. Odeskiy, "Boron and Aluminum Boron-silicate Glasses of Silicate Glasses"; the second by V. I. Odeskiy, "On the Structure of Silicate Glasses"; the third by V. I. Odeskiy, "On the Structure of Silicate Glasses". The reports dealt with the structure and properties of glasses, the mechanism of vitrification, and the physical and chemical properties of glasses. The conference was held in the city of Leningrad, which was then the capital of the USSR.

Card 3/8

The 6th meeting dealt with the electric properties of glasses. The first report was by V. I. Odeskiy, "On the Structure of Silicate Glasses"; the second by V. I. Odeskiy, "On the Structure of Silicate Glasses"; the third by V. I. Odeskiy, "On the Structure of Silicate Glasses". The reports dealt with the structure and properties of glasses, the mechanism of vitrification, and the physical and chemical properties of glasses. The conference was held in the city of Leningrad, which was then the capital of the USSR.

Card 4/8

The 7th meeting dealt with the electric properties of glasses. The first report was by V. I. Odeskiy, "On the Structure of Silicate Glasses"; the second by V. I. Odeskiy, "On the Structure of Silicate Glasses"; the third by V. I. Odeskiy, "On the Structure of Silicate Glasses". The reports dealt with the structure and properties of glasses, the mechanism of vitrification, and the physical and chemical properties of glasses. The conference was held in the city of Leningrad, which was then the capital of the USSR.

Card 5/8

L 65252-65 EWT(1)/EWP(e)/EWT(m)/EWP(t)/T/EWP(t)/EW(h) LJP(c) AT/WZ
ACCESSION NR: AP5014594 UR/0181/65/COT/006/1630/1633

AUTHOR: Kolosiyets, B. T.; Mamontova, T. N.; Stepanov, G. I.

TITLE: Concerning the impurity and induced photoconductivity of $\text{Ti}_2\text{Se} \cdot \text{As}_2\text{Te}_3$ chalcogenite glass.

SOURCE: Fizika tverdogo tela, v. 7, no. 6, 1965, 1630-1633

TOPIC TAGS: impurity photoconductivity, induced photoconductivity, glass property, carrier lifetime, relaxation time

ABSTRACT: This is a continuation of earlier work on the electric properties of glass semiconductors (FTT, Collection 2, 22, 1959, and elsewhere). The glass chosen had a relatively high conductivity at room temperature ($10^{-3} \text{ ohm}^{-1} \text{ cm}^{-1}$), making it possible to carry out the measurements at low temperatures. In addition, this composition shows a clearly pronounced thermostimulated current. The samples were investigated under various conditions at low temperature in darkness and illuminated. The photocurrent was measured in the temperature interval 100--200K after the sample reached an equilibrium dark resistance. The test procedures and sample preparation are briefly described. The results show that samples cooled in darkness and illuminated with light of wavelength 4--5.5 μ become photoconductive. Prior illumination with integral light always increased the photoconductivity some-

Card 1/2

L 65252-65

ACCESSION NR: AP5014554

3

what, and this photoconductivity was preserved for a long time in darkness. Removal of the long-wave radiation caused the dark conductivity to decrease slowly to its initial value. The existence of induced photoconductivity without a pronounced maximum confirms the hypothesis that the forbidden band of amorphous substances contains fluctuation levels. The depth of the local levels is estimated at 0.45 ev. The time dependence of the impurity and induced photoconductivity were also investigated, and the results show that the time of growth of the photoconductivity to saturation and the decrease to its stationary value in darkness ranges from 2 to 7 minutes, depending on the sample and on the experimental conditions. The effective lifetime of the carriers ranged from 15 to 25 seconds for the rising current and from 70 to 100 seconds for the relaxation of the current. Orig. art. has: 3 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad
(Physicotechnical Institute, AN SSSR)

SUBMITTED: 24 Oct 64

ENCL: 00

SUB CODE: MT, OP

NR REF SOV: 010

OTHER: 001

M/R
Card 2/2

NEPOMNOVA, V. A.

Plant lice of the right-bank forest-steppe region of the Ukrainian SSR
Kiev, Izd-vo Akademii nauk Ukr. SSR, 1953. 71 p. (54-21188)

AT523.16M25

Mamontova V. A.

USER/ Biology - Entomology

Card 1/1 Pub. 86 - 23/38

Authors : Mamontova, V. A., Cand. Biol. Sc.

Title : Plant lice are harmful to agriculture

Periodical : Priroda 44/7, 109 - 111, Jul 1955

Abstract : An analysis is made of the characteristics of winged and wingless plant lice, their life cycles, migrations, manner of feeding, etc. Fifteen different species are covered. Illustrations.

Institution : Inst Zoology, AS Ukr SSR

Submitted :

MAMONTOVA, V.O.

Elm varieties as propagation sources for some grass aphids. Trudy
Inst.zool.AN URSR 13:32-34 '56. (MLBA 9:11)
(Ukraine--Plant lice) (Elm)

USSR / General and Specialized Zoology. Insects. Harmful Insects
and Acarids. Pests of the Technical, Oil, Medicinal and
Essential-Oil Cultures.

Abs Jour : Ref Zhur - Biol. No 13, 1958, No. 32986

Author : Kalontova, V. G.

Inst : AS USSR

Title : The Role of the White (Black Locust) and the Yellow
Acacias in the Reservation of the Alfalfa Aphid.
(Aphis medicaginis Koch.)

Orig Pub : Zh. priklad. biol. i sel'sk. AN USSR, 1957, No 24, 91-99

Abstract : In the south of the Ukrainian SSR, the aphid deposits
its eggs not on the locusts (A) but on alfalfa. A is
only its intermediate (secondary) host. The aphids
which were hatched from the eggs on the alfalfa, migrate
to A, principally to the yellow acacia (YA). When the
second pair of leaves is formed on the cotton plant, YA

Card 1/2

USSR / General and Specialized Zoology. Insects. Harmful Insects and Acarids. Forest of the Technical, Oil, Medicinal and Essential-Oil Crops.

Abs Jour : Ref Zhur - Biol., No 13, 1958, No. 32956

draws to itself a great number of nymphs and winged insects, which infest the cotton plant. The cotton plant is infested more intensely near the forest belt than, less intensely near the belt of the white A and quite weakly when away from either belt. By eliminating A from the forest belt between the lucerns and the cotton plants, the intermediate "bridge" - the place of the aphid reservation - disappears. It is impossible to consider A as a plant, which "draws away" the aphids from the cotton plant. It is imperative to wage a stubborn struggle against the aphids in A. -- A. P. Adrianov

Card 2/2

MAMONTOVA, Vera Alekseyevna [Mamontova, V.O.]; TELENGA, M.A. [Telienka, M.A.], doktor biolog.nauk, etv.red.; BRAGINSKIY, L.P. [Bragina kyi, L.P.], red.izd-va; MIL'OKHIN, I.D., takhn.red.

[Plant lice of the Ukraine] Zlakovi popelytsi Ukrainy. Kyiv, Vyd-vo Akad.nauk URSR, 1959. 92 p. (MIRA 12:11)
(Ukraine---Plant lice)

MAMONTOVA, V.O.

Plant lice (Aphididae) in the Kanev Biogeographical Preserve.

Nauk.zap.Kiev.un. 8 no.6:87-116 '49.

(MLRA 9:10)

(Kanev District--Plant lice)

MAMONTOVA, Ye.V.

First findings of microfauna in the Toarcian deposits of the
northwestern part of Greater Caucasus. Nauch.biul.Len.un. no;23:52-
56 '49. (MLRA 10:4)

1. Kafedra istoricheskoy geologii.
(Caucasus--Foraminifera, Fossil)

15-57-5-5789

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 5,
p 11 (USSR)

AUTHOR: Mamontova, Ye. V.

TITLE: Foraminifers From the Upper Liassic of the Northwestern
Caucasus (Foraminifery verkhnego leyasa Severo-
Zapadnogo Kavkaza)

PERIODICAL: Vestn. Leningr. un-ta, 1956, Nr 12, pp 20-39.

ABSTRACT: The author summarizes the stratigraphy and describes
briefly the foraminifers of the Lower Jurassic rocks
in the northwestern Caucasus (Kuban'-Laba). The horizons
distinguished include the lower Liassic--a volcanic
group up to 400 m thick; the middle Liassic--slaty
shales up to 150 m thick; the Toarcian series--shales,
sandstones, and local conglomerates, with ammonites, up
to 1470 m thick; the Aalenian series--crinoidal
limestones with clays, sands, and volcanic layers, up
to 200 m thick, with ammonites. Foraminifers have been
identified in the upper Toarcian and in the lower

Card 1/2

Foraminifera from the Tertiary of the Tethyan region (1958-1959)

Aalenian. The Tethyan region is characterized by foraminifera. Lagenids are most abundant, but also agglutinates and spirillulines are also present in large numbers. The Aalenian group contains 11 species, all lagenids. The author describes 18 species and varieties of foraminifera. Six of the species are illustrated with a bibliography with 12 references.

Part 2/2

V. A. K.

MAMONTOVA, Ye.V.

Foraminifera from the Moldavian upper Jurassic. Vest.LGU 14
no.18:31-42 '59. (MIRA 12:8)
(Moldavia--Foraminifera, Fossil)

PROZOROVSKIY, V.A., mladshiy nauchnyy sotrudnik; KOROTKOV, V.A.,
mladshiy nauchnyy sotrudnik; MAMONTOVA, Ye.V.; PORETSKAYA, Ye.S.;
PROZOROVSKAYA, Ye.L., mladshiy nauchnyy sotrudnik; KRYMEOL'TS,
G.Ya., nauchnyy red.; TOKAREVA, T.N., vedushchiy red.;
YASHCHURZHINSKAYA, A.B., tekhn.red.

[Neocomian in western Turkmenia] Neokom Zapadnoi Turkmenii.
Leningrad, Gos.nauchno-tekhn.izd-vo nef't.i gorno-toplivnoi
lit-ry Leningr.otd-nie, 1961. 185 p. (Leningrad. Vsesoiuznyi
geologicheskii institut. Trudy, vol. 51). (MIRA 15:3)
(Turkmenistan--Geology, Stratigraphic)

MAMONTOVA, Ye.V.; GOLOVENOK, V.K.

Cone-in-cone structure in Cambrian blue clays. Vest.LGU 18
no.6:135-136 '63. (MIRA 16:4)
(Tosna Valley--Clay)

MAMONTOVA, Ye.V.

Genus *Iberina lusitanica* (Egger) from Upper Jurassic sediments in
the Crimea. Trudy geol. muz. AN SSSR no.14:147-154 '63.

(MIRA 17:11)

POPOV, I.V.; MAMONTOVA, Yu.M.

Industrial aspects in experimental problems. Fiz. v shkole 15 no.2:
72 Mr-Apr '55. (MIRA 8:5)

1. Pedagogicheskiy institut, g.Balashov.
(Physics--Study and teaching) (Motion)

38197. MAMONTOVA, Z. A.

Metody sushki dekorativnykh rasteniy. Byulleten' Glav. botan.
sada, vyp. 4, 1949, s. 66-67

MAMONTOVA, Zinaida Alekseyevna

[Drying plants and preserving their color and shape] Zasushivanie
rastenii s sokhraneniem ikh tsveta i formy. Moskva, Gos.izd-vo
sel'khoz.lit-ry, 1959. 180 p. (MIRA 13:3)
(Plants--Collection and preservation)

POPOV, V.V., kand.tekhn.nauk; MAMONTOVA, Z.G., inzh.; NEZAYEVA, T.V., inzh.

Methods of oil impregnation of fir, pine and larch ties with
preliminary puncturing. Trudy TSNII MPS no.224:58-104 '62.
(Railroads--Ties) (Wood--Preservation) (MIRA 15:4)

MAMONTOVA-SOLUKHA, V.A. [Mamontova-Solukha, V.O.]

Plant lice of the genus *Saia* Mordv. (Homoptera, Aphidoidea). Zbir.
prats' Zool.muz. AN URSS no.31:76-79 '62.

A new species of plant lice *Periphyllus steveni* sp. nov. (Homoptera,
Aphidoidea) from the Crimea. Ibid.:80-81 (MIRA 17:2)

MAMONTOVA-SOLOUKHA, V.A. [Mamontova-Solukha, V.O.]

Plant life of the Ukrainian Polesye. Part 1. Pratsi Inst. zool.
AN URSR 20:52-2 '64. (MIRA 18:4)

63332-65 EPT(n)-2/EWT(m)/EWP(b)/T/ENA(d)/EWP(w)/EWP(t) Pu-4 IJP(c) JD/JG
 UR/0370/65/000/003/0146/0150
 537.3 35
 B
 AUTHOR: Kalinin, G. P.; Yelvtin, O. P.; Mamontovskaya, L. V.
 TITLE: Physical and mechanical properties of alloys of the Ti-Nb-Al system
 SOURCE: AN SSSR. Izvestiya. Metally, no. 3, 1963, 146-150
 TOPIC TAGS: titanium base alloy, niobium containing alloy, aluminum containing alloy, thermoelectromotive force, electrical resistivity, heat conduction, ultimate strength, plasticity, phase diagram
 ABSTRACT: In the investigation of titanium alloys considerable attention is paid to their strength, physicochemical, and technological properties. However, the investigation of physical properties (heat conduction, thermo-e.m.f., electrical properties) is at best performed to obtain a broader picture of the alloys used in industry. This complicates somewhat the selection and development of titanium-base alloys with desired physical properties. To fill this gap, the authors performed a systematic investigation of the concentration dependence of certain physical and mechanical properties of alloys of the Ti-Nb-Al system containing up to 10% Al and up to 50% Nb. The Nb content was increased through every 5% and the Al content,
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L 63332-65

ACCESSION NR: AP5017474

through every 2.5%. Heat conduction, electrical properties, thermo-e.m.f. and mechanical properties of the alloys were investigated. 70-g ingots of these alloys were obtained by smelting in an electric arc furnace with a nonconsumable tungsten electrode in an argon atmosphere. The ingots were forged into rods of 12-14 mm diameter and then swaged to a diameter of 9 mm and annealed in a vacuum of the order of $1 \cdot 10^{-5}$ mm Hg. Their electrical resistivity was determined by the potentiometric method and found to decrease -- after an initial increase -- with increasing Nb content (maximum resistivity $0.95 \text{ ohm} \cdot \text{mm}^2/\text{m}$ in the presence of ~35% Nb), and increase with increasing Al content. The alloys with the maximum electrical resistivity ($1.8 \text{ ohms} \cdot \text{mm}^2/\text{m}$) contain 8-10% Al and 7.5% Nb. Thermo-e.m.f. is decisively determined by the Al content: The maximum absolute thermo-e.m.f. (about $9.5\text{-}10 \text{ } \mu\text{V}/\text{deg}$) is displayed by alloys containing 4-6.5% Al and from 0 to 22% Nb. Heat conduction generally increases with increasing Nb content and decreases when Al is added to Ti-Nb alloys. The minimum heat conduction, $0.018 \text{ cal}/\text{cm} \cdot \text{sec} \cdot \text{deg}$, is displayed by alloys containing 15-22% Nb and 9-10% Al. As for the mechanical properties, the maximum ultimate strength, $140\text{-}150 \text{ kg}/\text{mm}^2$, at a relative elongation of up to 3%, is displayed by alloys containing 20-50% Nb and 7-10% Al. Aluminum exerts a decisive influence on the increase in electrical resistance and decrease in heat conduction and in thermo-e.m.f. On the other hand, the increase in Al content is accompanied by an increase in the strength of the

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alloys and a decline in their plasticity and technological properties. The most felicitous combination of high values of the investigated physical properties with a satisfactory plasticity is displayed by alloys containing 35-40% Nb and up to 2-3% Al, which corresponds to the area of the $(\alpha + \beta)$ boundary of the β -phase regions of the equilibrium phase diagram (Fig. 1). Orig. art. has: 5 figures.

ASSOCIATION: none

SUBMITTED: 02Jul64

ENCL: 01

SUB CODE: MM, SS

NR REF SOV: 006

OTHER: 002

Card 3/4

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ACCESSION NR: AP5017474

ENCLOSURE: 01

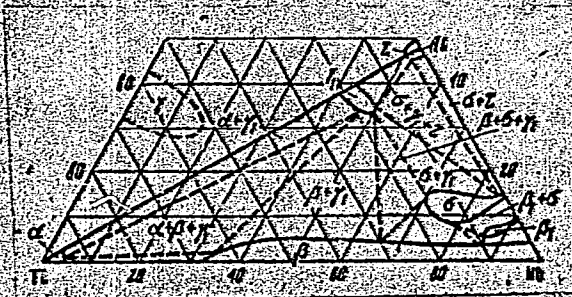


Fig. 1. Isothermal section of the phase diagram of the Ti-Nb-Al system at 20°C

Card ^{KC} 4/4

ACC NR: AP6013365

SOURCE CODE: UR/0370/66/GOC/002/0125/0130

AUTHOR: Kalinin, G. P. (Moscow); Yelyutin, G. P. (Moscow); Mamontovskaya, L. V. (Moscow)

ORG: none

TITLE: Physical and mechanical properties of alloys of the Ti-Nb-Mo system

SOURCE: AN SSSR. Izvestiya. Metally, no. 2, 1966, 125-130

TOPIC TAGS: titanium alloy, niobium alloy, molybdenum alloy, solid mechanical property, solid physical property

ABSTRACT: The concentration dependences of some physical and mechanical properties of alloys in the titanium corner of the Ti-Nb-Mo system were studied on alloys containing up to 50% Nb and 40% Mo. The electrical resistance, its temperature coefficient, thermal conductivity, thermal emf, modulus of normal elasticity, strength, hardness, and plasticity were determined by plotting the corresponding composition vs. property diagrams. Two regions of alloys are distinguished: one with low strength properties and a low plasticity, and one with a high strength and a satisfactory plasticity. The first group of alloys with a strength of 950-1000 kg/mm^2 (97-102 kg/mm^2) and a plasticity of 9-14% includes Ti-Nb alloys with 30-35% Nb, Ti-Mo alloys with 10-13% Mo, and intermediate ternary alloys Ti-Nb-Mo. The alloys are located at the boundary of the region of the martensitic transformation. The group

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UDC: 669.017.13

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ACC NR: AP6013365

* alloys with a satisfactory plasticity includes binary Ti-Nb alloys with 45-55% Nb, binary Ti-Mo alloys with 20-25% Mo, and intermediate ternary alloys Ti-Nb-Mo, located at the boundary of $(\alpha+\beta)\beta$ -phase regions. These alloys have an ultimate strength of 500-900 Mn/m^2 (51-92 kg/mm^2) and an elongation of 15-17%. Orig. art. has: 5 figures.

SUB CODE: 11/ SUBM DATE: 05Nov64/ ORIG REF: 002/ OTH REF: 001

Card 2/2/11/28

MALYSHEV, V.G., inzh.; MAMONTOVSKIY, V.A., inzh.; PFUL', B.Ye., inzh., red.

[Machine for boring holes in frozen ground] Mashina dlia bureniia shpurov v merzlykh gruntakh; po materialam PKB Glavstroimekhanizatsii Ministerstva transportnogo stroitel'stva SSSR. Moskva, Gosstroizdat, 1960. 6 p. (MIRA 14:11)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. Byuro tekhnicheskoy informatsii. 2. Proyektno-konstruktorskoye byuro Glavnogo upravleniya po mekhanizatsii stroitel'nykh rabot Ministerstva transportnogo stroitel'stva SSSR (for Malyshev, Mamontovskiy).
(Boring machinery) (Frozen ground)

MAMONTOVSKIY, V.A., inzh.

The VES-3 electric power station installed in a railroad car.
Transp.stroi. 10 no.4:50-51 Ap '60. (MIRA 15:9)
(Electric power plants)

Bobozhiy, G.
POBOZHIIY, G.; UL'KIN, E.; HAMONYAKO, M.

Indifferent attitude toward an important matter. Radio no.8:11
Ag '57. (MLRA 10:8)

1. Predsedatel' pervichnoy organizatsii Dobrovol'nogo obshchestva
sodeystviya armii, aviatsii i flotu uchilishcha No.3 (for Bobozhiy).
(Klintsy--Radio clubs)

MAMOSHICH, R.R., inzhener.

Distribution system of 6-10 kv. with reactors on the external connections. Elek. sta. 28 no.1:40-44 Ja '57. (MLRA 10:3)
(Electric power distribution)

MAMOSHIN, R. R.

Electrical Engineering Abst.
Vol. 57 No. 675
Mar. 1954
Electrical Engineering

86. New principle of construction and design of substations. S. I. K. (K. A. Orlow, Moscow, USSR). K. A. Orlow. *Elektr. Stantsii*, 1953, No. 2, 30-4. In Russian.

The principal design of electrical substations for 35, 110 and 220 kV has not changed in the USSR during the past 20 years. Some minor structural improvements have been made in several 220 kV substations of the Moscow power supply system such as a different arrangement of the busbars, central arrangement of the 10 kV part and the control building. Saving on metal, steel, concrete and cable duct boxes has been tabulated. Similar measures for lower voltages and revision of circuit-breaker phase clearance are recommended.

I. BUSHMANN

MAMOSHIN, R. R.

AID P - 2541

Subject : USSR/Electricity

Card 1/2 Pub. 26 - 25/32

Authors : Chernyshevich, V. I., S. A. Kudryashov, E. A. Bugrinov,
R. R. Mamoshin, K. A. Orlov, V. M. Yefremov, Engs.

Title : On G. M. Kayalov's article "6-10 kv switch gear and
control equipment in 2-story substations" (Letters
from readers)

Periodical : Elek sta, 6, 54-56, Je 1955

Abstract : G. M. Kayalov in his article (No. 10, 1954, this
journal) suggested the erection of 2-story substations
for 6-10 kv switchgear instead of the standard 3-story
buildings erected for industrial and regional sub-
stations. His suggestions are considered favorably
by several engineers. However, some recommendations
on the distribution of the equipment and on the layout
of the 2-story substations are made. One diagram.

Elek sta, 6, 54-56, Je 1955

AID P 2541

Card 2/2 Pub. 26 - 25/32

Institution : None

Submitted : No date

MAMOSHIN, R. R.

1003. 6-10 KV SWITCHGEAR WITH REACTORS ON THE
INTERNAL CONNECTIONS. R. R. Mamoshin.
Elektr. Stantsii, 1957, No. 1, 40-41. in Russian.
Paper describes an improved indoor switchgear arrangement
for distribution substations with two transformers and 12 outgoing
double cable lines. Due regard is paid to sectional construction,
economy of building and structural materials, improved busbar
type and arrangement etc. Clear line drawings illustrate all the
relevant details, and the economic advantages over the conventional
type are analysed in two tables. Electrical Research Association

2

R. R. Mamoshin
gyp

~~MAPOSHIN~~ R.R., inzh.

Canadian compressed-air circuit breaker (from "Electrical
Engineering," no.5 1956). Elek.sta. supplement no.6:46 '57.
(MIRA 11:2)

(Canada--Electric circuit breakers)

Wassman F. K.

MANOSHEV, B.B., inzhener.

Efficient emergency lighting circuits for 110 kv. substation
Elek.sta 28 no.7:92 J1 '57. (MLRA 10-4)

(Electric power plants)

~~MAMOSHIN, R.R., inzh.~~

Author's reply. Elek. sta. 29 no.10:84-85 0 '58.
(Electric power distribution)

(MIRA 11:11)

MAMOSHIN, R. R. Cand Tech Sci -- (diss) "Certain peculiarities of the distribution of potentials on ~~subway~~ subway rail circuits." Mos, 1959. 7 pp (MPS USSR. Mos Order of Lenin and Order of Labor Red Banner Inst of Engineers of Railroad Transport im I. V. Stalin), 150 copies (KL, 47-59, 115)

MARKVARDT, K.G., prof., doktor tekhn.nauk; ~~MAKOSHIN~~, R.R., inzh.

Some aspects of distribution potentials in subway rail circuits.
Trudy MIIT no.104:178-204 '59. (MIRA 12:9)
(Electric circuits) (Subways)

MAMOSHIN, R.R., inzh.

Effect of the electric connection of the running of various
subway lines and roundhouse tracks on the distribution of rail
potentials. Trudy MIIT no.122:54-74 '59.

(MIRA 13:5)

(Electric railroads--Rails)

MAMOSHIN, R.R., inzh.

Effect of a unequal "rail-ground" contact resistance of subway lines on the distribution of potentials and currents in rails and ground. Trudy MIIT no.122:75-90 '59. (MIRA 13:5)
(Electric railroads--Rails)
(Subways)

MAMOSHIN, R.R., kand.tekhn.nauk

Method for determining the contact resistance of the rail-ground system of a subway. Trudy MIIT no.144:131-136 '62. (MIRA 15:10)
(Electric railroads--Wires and wiring)
(Electric railroads--Current supply)

MAMOSHIN, R.R., kand.tekhn.nauk

Evaluation of voltages in the branches of a track circuit of a
subway. Trudy MIIT no.144:137-148 '62. (MIRA 15:10)
(Subways) (Electric railroads—Wires and wiring)
(Electric railroads—Current supply)

MAMOSHIN, R.R., dotsent, kand.tekhn.nauk

Three-phase short circuits at the secondary end of a traction
transformer with an open delta network. Trudy MIIT no.199:79-83
'65. (MIRA 18:8)

MAMOSHKIN, L.

Pay more attention to work with trade-union activists.
Zhil.-kom.khoz. 9 no.10:11 '59. (MIRA 13:2)

1. Inspektor Tsentral'nogo komiteta profsoyuza rabochikh
mestnoy promyshlennosti i kommunal'nogo khozyaystva.
(Trade unions) (Municipal services)

MAMOSHKIN, L.

Workers' aid to the farms. Mest.prom.i khud.promys. 2 no.1:4
Ja '61. (MIRA 14:4)
(Trade unions) (Agricultural machinery industry)

MAMOSHKIN, L.

Fruits of complacency. Zhil.-kom. khoz. 11 no.4:10-11 Ap '61.
(MIRA 14:6)

1. Inspektor Tsentral'nogo komiteta profsoyuza rabochikh mestnoy
promyshlennosti i kommunal'nogo khozyaystva.
(Vladimir Province—Trade unions)

MAMOSHKIN, L.

Houses of culture for village workers. Zhil.-kom. khoz. 11
no.8:16 Ag '61. (MIRA 14:9)

1. Inspektor TSentral'nogo komiteta profsoyuza.
(Workingmen's clubs)

MAMOSHKIN, L.

Accounts and elections in trade unions. Zhil.-kom. 11
no.9:32 S '61. (MIRA 14:11)

1. Inspektor Tsentral'nogo komiteta profsoyuza rabochikh
mestnoy promyshlennosti i kommunal'nogo khozyaystva.
(Trade unions)

MAMOSHKIN, L.

Trade-union group committee. Sov. profsoiuzy 17 no.7:38 Ap '61.
(MIRA 14:3)

1. Inspektor TSentral'nogo Komiteta profsoyuza rabochikh mestnoy
promyshlennosti i kommunal'nogo khozyaystva.
(Trade unions)

MAMOSHKIN, L. (Chelyabinsk)

Serious reproof to the province committee. Mest.prom. i khud.
promys. 3 no.3:4 Mr '62. (MIRA 15:3)
(Chelyabinsk Province—Manufactures)

MAMOSHKIN, L.

Reports and elections. Mest.prom.i khud. promys. 3 no.1:30 Ja '63.
(MIRA 16:2)

1. Inspektor Tsentral'nogo komiteta professional'nogo soyuza
rabochikh mestnoy promyshlennosti i kommunal'nogo khozyaystva.
(Trade unions)

MAMOSHKIN, L.

Reports and elections in Trade Unions. Mest. prom. i khud.
promys. no.5:14 My '63. (MIRA 16:7)

1. Inspektor Tsentral'nogo komiteta professional'nogo soyuza
rabochikh mestnoy promyshlennosti i kommunal'nogo khozyaystva.
(Trade Unions)

KOVALEV, S.I., inzhener; MAMOSHKIN, R.R., inzhener; ORLOV, K.A., inzhener.

New principles for constructing and arranging substations. Elek.sta. 24 no.8;
30-34 Ag '53. (MLRA 6:8)

(Electric substations)

MAMOSHKIN, R.R., inzh.

Detecting electric discharges by means of ultrasound (from
"Electrical Engineering," 1956, vol.10). Energokhoz.za rub.
no.6:45-46 H-D '58. (MIRA 12:4)
(Electric discharges) (Ultrasonic waves)

МАМОТ, М. Д.

М. Д. Мамот защитил 2/VI 1960 г. в Совете Военно-медицинской ордена Ленина академии имени С. М. Кирова (Ленинград) диссертацию на тему «*Особенности гемодинамики при инфарктах миокарда*».

Комплексное исследование динамики артериального давления, минутного объема сердца, удельного периферического сопротивления и степени напряжения стенок крупных артериальных сосудов позволяет с помощью механокардиографа изучить изменения функционального состояния сердечно-сосудистой системы в зависимости от клинического течения инфаркта миокарда и является одним из объективных методов контроля за эффективностью терапевтических мероприятий.

Candidate of Medical Sciences

Dissertations approved by the Higher Attestation Commission in
January and February of 1961. Serap. arkh. no.6:117-121 '61

20 (5)

MAMOTENKO, I.I., inzh.

Introducing the use of polyethylene tubes on ships.
Sudostroenie 27 no.5:51-53 My '61. (MIRA 14:6)
(Pipe, Plastic)
(Marine pipe fitting)

MAMOTENKO, I.I., inzh.

Use of silver ions for the disinfection and conservation of
soft water on ships. Sudostroenie 29 no.3:19-21. Mr '63.

(Ships—Water supply) (Silver ions) (MIRA 16:4)

MAMOTYUK, Ye.M.

4.

Polarographic studies of the process of denaturation. N. M. Mamotyuk and Ye. M. Mamotyuk (A. M. Gor'kiy State Univ., Kharkov). *Ukrain. Biochim. Zhur.* 26, 140-51 (in Russian, 1964). In denaturation there is an increase in the reaction groupings (-SH) and (-SS-). In the presence of Co proteins give two successive polarographic waves, the second of which is regarded as due to the increase in the protein of (-SH) and (-SS-) groupings. The process of denaturation causes a varying increase in the second wave. This manifestation was utilized in studying the effects of acid-alkali denaturation of proteins. To 1 ml.

of 2.5% soln. of serum albumin was added 1 ml. of 0.2N HCl or NaOH and the denaturation allowed to proceed at 20°. Eight ml. of distd. H₂O was then added. For the polarographic detn. 0.3 ml. of this was mixed with 4 ml. of NH₄OH buffer of pH 9 (0.2N soln. NH₄Cl and NH₄OH) to which, just before the detn., was added 0.002N CoCl₂. Native protein was used in correspondingly prepd. control tests. Detns. were made immediately upon the addn. of the acid or alkali, and after 10, 30, 45 min. and 1, 3, 24, 70, and 120 hrs. The increase in the wave height as compared with Co was recorded. In general, the polarograms indicated that the effects of acids and alkalis on proteins differ considerably. The addn. of NaOH causes an immediate rise in the height of both protein waves. In 20-45 min. a max. is attained which is followed by a gradual lowering, reaching a min. height in 24 hrs. The addn. of acid causes only slight changes in the first 30 min. This is followed by a slow rise in the height of the two waves, which is gradual but continuous for a long period of time. This parallels the changes in optical activity and the quant. formation of ppt. during the neutralization of such acidified protein solns. A similar parallelism is manifest in alkali-treated proteins: the specific rotation and vol. of pptn. rise immediately and simultaneously with the polarographic waves. The no. of the -SS- groups reaches a max. in 30-45 min. as is indicated by the polarogram; thereafter the curves gradually become lower, while the ppt. increases. Such departure from parallelism between the two reaction indicators is due to the destruction of the free -SS- groups by the alk. medium, as indicated by the perceptible H₂S color. The polarograms of specially prepd. solns. of the acid and alk. protein ppts. differ markedly: the two waves of the acid ppt. being rather high while those of the alk. ppts. are low. This confirms the conclusion reached regarding the destruction of the -SS- groups in the alk. protein soln.

H. S. Levine

L 16948-63

BWT(m)/BDS/ES(j) AFFTC/ASD AR/K

ACCESSION NR: AT3002358

8/2930/62/000/000/0016/0022

AUTHOR: Mamotyuk, Ye. M. (Kharkov)

54

TITLE: Study of early blood protein changes during total X-irradiation of the organism by the polarographic method

SOURCE: K voprosam ranney diagnostiki ostroy luchevoy bolezni; sbornik nauchnykh rabot. Kiev, Medgiz USSR, 1962, 16-22

TOPIC TAGS: blood protein, polarographic method, sulfhydryl group, disulfide group, albumin globulin coefficient, X-ray

ABSTRACT: Changes in the total number of sulfhydryl and disulfide groups in the blood proteins of rats and rabbits were studied. The rats were X-irradiated in doses ranging from 300 to 5000 r (RUM-3 unit, 25-31 r/min) and the rabbits were X-irradiated at 200 r. Blood was taken from decapitated rats and live rabbits for polarographic measurement of equal wave heights to determine concentrations of free -SH and -S-S- groups. Albumin globulin coefficients were determined for the rabbit blood serum. Results show that in the first few minutes after irradiation for both the rat and rabbit blood serums the -SH and -S-S- groups decrease, then during the 1st hour they are

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L 16948-63

ACCESSION NR: AT3002358

0
restored to normal level or slightly higher, and after 24 hrs they gradually decrease. The albumin globulin coefficients for the rabbit blood serum were determined to explain the changes in -SH and -S-S- groups after irradiation and indicate no significant changes. It appears that the changes in the thiol and disulfide groups are not related to quantitative changes, but take place because of qualitative changes in the sulfhydryl and disulfide groups. These qualitative changes may be the result of temporary oxidation of these groups and the formation of polarographic inactive, unstable products. Orig. art. has: 4 figures, 1 table.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 28May63

ENCL: 00

SUB CODE: AM

NO REF SOV: 012

OTHER: 003

Card 2/2

ARNAUTOV, A. K.; BURSHTEYN, S. A.; GENES, V. S.; DZHAFAROV, G. K.;
KOGAN, I. A.; MAMOTYUK, Ye. M.; NIKOLAYEVA, M. G.; PISKAREVA,
Ye. V.; POPOVA, L. Y.; TKACH, V. K.; PASTUCHENKO, O. V.;
FRENKEL', L. A.; TSYBENKO, P. A.

Characteristics of some early reactions of rats, irradiated
with various doses, to burning by flame. Radiobiologiya 2 no. 2.
406-413 '62. (MIRA 15:7.

1. Institut meditsinskoy radiologii, Khar'kov.

(X RAYS---PHYSIOLOGICAL EFFECT)
(BURNS AND SCALDS)

L 65260-65 EWT(1)/EWT(m)/EPF(c)/EWP(t)/EWP(b) IJP(c) WW/JD/GQ

ACCESSION NR: AP5014231

UR/0386/65/001/003/0002/0007

AUTHOR: Mamovats, D. V.; Parfen'yev, R. V.; Shalyt, S. S.

TITLE: Magnetophonon resonance in n -InAs

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 1, no. 3, 1965, 2-7

TOPIC TAGS: longitudinal magnetic field, polycrystal, indium compound, arsenide, magnetoresistance, magnetic field intensity, semiconductor crystal

ABSTRACT: Under proper conditions, the effect of the field on magnetoresistance and magnetothermoelectromotive force in n -InSb takes on an oscillating character due to magnetophonon resonance. The physical nature of this new effect is associated with the fact that nonelastic scattering of electrons by optical phonons increases when the distance between Landau levels becomes equal to the energy of the optical phonons. In this paper, the authors studied the longitudinal magnetoresistance of polycrystalline n -InAs specimens, $n = 1.25 \cdot 10^{16} \text{ cm}^{-3}$, $\mu_{900\text{K}} = 6 \cdot 10^4 \text{ cm}^2/\text{v} \cdot \text{sec}$. Curves for longitudinal magnetoresistance as a function of field strength are shown in fig. 1 and 2 of the Enclosure for a stationary and a pulsed magnetic

Card 1/4

L 65260-65

ACCESSION NR: AP5014231

3

field. Investigations of the transverse magnetoresistance in n -InAs for the same range of temperatures and fields showed no noticeable oscillations. Orig. art. has: 2 figures, 2 formulas.

ASSOCIATION: Institut poluprovodnikov Akademii nauk SSSR (Institute of Semiconductors, Academy of Sciences, USSR)

SUBMITTED: 18Mar65

ENCL: 02

SUB CODE: EM, SS

NO REF SOV: 002

OTHER: 004

Card 2/4

L 65260-65

ACCESSION NR: AP5014231

ENCLOSURE: 01

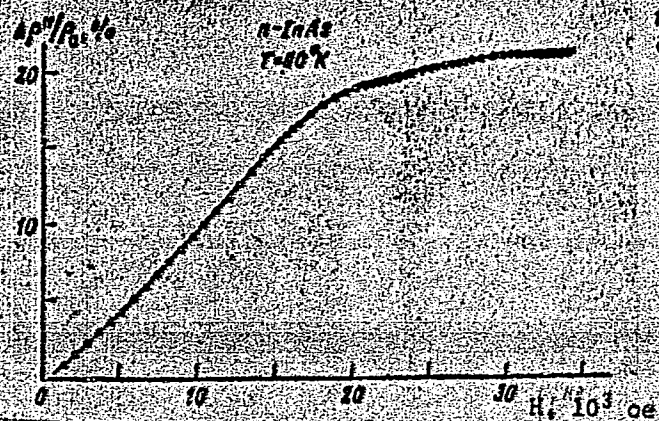


Fig. 1. Magnetoresistance of n-InAs as a function of longitudinal field strength at 90°K.

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L 65260-65

ACCESSION NR: AP50142/1

ENCLOSURE: 02

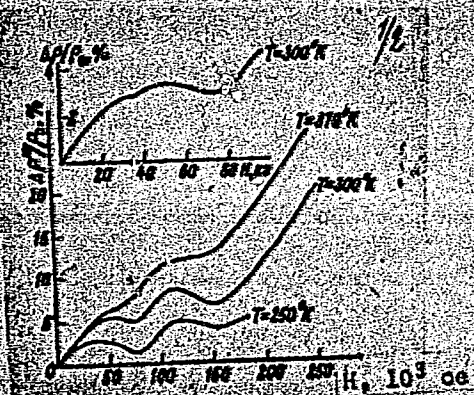


Fig. 2. Magnetoresistance of n -InAs as a function of longitudinal field strength in a pulsed magnetic field at various temperatures.

Card 7/4

04111 MAICING, S. A. C. 1954, 3:14, 10:10, 10:10. Truly Lenin P. Jan. - 2 Jan.
1954. IN-CA, T. III, 1, 4, 5. 10-10. - 10:10. 10:10.
30: 10:10, 10:10, 10:10.

24284

L.A. CIKIC, S. F. Frontal'naya shchel' : otkrytiye v svyazi s vypravnoy shchel'yu.
Trudy Leningr. San.-gig. inst. 1949, T. III, 1949, S. 52-53. - Bibliogr. 1 nazv.

SC: Leningr. No. 11, 1949.

MAICYAC, S. F.

24282

MAICYAC, S. F. H vo rosu ob obrazovanii slovozhreb n. Trudy Lenin.
San.-gigien. vol. II-IV, T. III, 1946, S. 39-57. - Bibliia n: 1947.

SC: Letopis, No. 22, 1946.

AFINOGENOVA, E.Z.; SOSHYAKOV, N.G., doktor meditsinskikh nauk, zaveduyushchiy;
MAMOIYKO, S.P., professor, direktor.

Intestinal obstruction caused by lymphogranulomatosis. Vest.khir. 73 no.5:
59-60 S-O '53. (MLRA 6:11)

1. Kafedra obshchey khirurgii Molotovskogo meditsinskogo instituta.
(Hodgkin's disease) (Intestines--Obstruction)

MAMPEL', I., NUDIN, D.

Cattle - Grading

Checking live weight by a new method. Mas. ind. 23, no. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, December 1972. UNCLASSIFIED